# HELIUM STATISTICS

# By Thomas D. Kelly and Norbert Pacheco

# [All values in metric tons (t) unless otherwise noted] Last modification: June 24, 2002

						Apparent	Unit value	Unit value	World
Year	Production	Shipments	Imports	Exports	Stocks	consumption	(\$/t)	(98\$/t)	production
1935	49					49			49
1936	22					22			22
1937	23					23			23
1938	29					29	2,830	32,700	29
1939	30					30	2,800	32,900	30
1940	45					56	2,360	27,500	45
1941	78	106				57	2,010	22,300	78
1942	159	173				173	2,140	21,400	159
1943	558	559				559	2,260	21,400	558
1944	608	592				609	2,390	22,100	608
1945	454	291			99	454	2,510	22,900	454
1946	279	211			139	278	2,640	22,000	279
1947	337	251			94	337	2,760	20,200	337
1948	303	244				303	2,760	18,700	303
1949	264	247				244	2,760	18,900	264
1950	390	390				388	2,870	19,400	390
1951	537	537				523	2,760	17,400	537
1952	693	693				695	2,760	17,000	693
1953	772	756				757	2,780	16,900	772
1954	914	910			418	911	2,990	18,100	914
1955	1,060	1,131			341	1,130	3,670	22,400	1,060
1956	1,170	1,280			222	1,280	3,670	22,000	1,170
1957	1,400	1,488			117	1,490	3,670	21,200	1,400
1958	1,600	1,688			83	1,690	3,670	20,700	1,600
1959	2,290	1,800			518	1,800	3,670	20,500	2,290
1960	3,080	2,278			1,310	2,280	3,670	20,200	3,080
1961	3,490	2,645			2,140	2,640	3,670	19,900	3,490
1962	3,420	2,874		43	2,510	3,020	7,440	40,000	3,420
1963	10,700	3,007		0	10,100	3,170	7,440	39,600	10,800
1964	19,300	3,199		0	26,000	3,420	7,440	39,200	19,400
1965	20,900	3,349		0	43,500	3,630	7,440	38,400	21,000
1966	22,100	3,876		0	61,000	4,540	7,440	37,400	22,100
1967	22,500	4,349		192	79,200	4,160	7,440	36,300	22,700
1968	22,300	4,157		312	97,400	3,840	7,440	34,900	22,500
1969	22,300			431	116,000	3,210		33,100	
1970	22,100	3,103		503	135,000	2,600	7,440	31,200	22,200
1971	21,900	2,765		513	154,000	2,250	7,440	30,000	22,400
1972 1973	19,600	3,007		537	171,000	2,470		29,000	20,200
	15,400	3,103		561	183,000	2,540		27,300	16,000
1974	4,240	3,351		618	184,000	2,730	7,440	24,600 22,500	4,910
1975 1976	5,170	3,573		690 834	185,000	2,880	7,440	,	5,870
1976	6,690 6,370	3,876 4,513		834	187,000 189,000	3,040	7,440 7,440	21,300 20,000	7,410 7,080
1977	6,550	4,513		911	191,000	3,730 3,890		18,600	7,080
1978	7,280	5,272		1,170	191,000	3,890	7,440 7,440	16,700	8,150
1979	6,540	5,629		1,170	193,000	3,920 4,140	7,440	14,700	7,110
1980	5,110	6,018		1,430	194,000	4,140		13,300	5,680
1981	1,110	5,966		1,800	188,000	4,130		12,600	1,830
1982	2,760	6,532		1,760	184,000	4,160	7,440	13,000	3,240
1983	5,630	7,849		1,780	182,000	5,970	7,970	12,500	6,340
1984	4,780	9,027	0	2,100	178,000	6,920	7,970	12,300	5,260
1985	4,780	9,027	0	2,100	173,000	7,230		11,900	
1980	4,770	9,307	U	2,070	1/3,000	1,230	7,970	11,900	3,3/0

# HELIUM STATISTICS

# By Thomas D. Kelly and Norbert Pacheco

[All values in metric tons (t) unless otherwise noted]
Last modification: June 24, 2002

						Apparent	Unit value	Unit value	World
Year	Production	Shipments	<b>Imports</b>	Exports	Stocks	consumption	(\$/t)	(98\$/t)	production
1987	9,240	10,496	0	2,370	172,000	8,130	7,970	11,400	9,840
1988	10,700	12,087	0	3,110	171,000	8,970	7,970	11,000	11,900
1989	11,200	13,526	0	3,740	165,000	9,780	7,970	10,500	12,400
1990	17,800	14,356	0	4,180	162,000	10,200	7,970	9,950	19,200
1991	14,600	14,914	0	4,590	161,000	10,300	7,990	9,560	16,500
1992	15,600	15,981	0	5,200	161,000	10,800	11,700	13,600	17,400
1993	16,800	16,184	0	4,740	162,000	11,400	11,700	13,200	18,700
1994	19,000	16,929	0	4,230	164,000	12,800	11,700	12,900	21,200
1995	17,100	16,269	0	4,690	164,000	11,600	11,700	12,500	22,000
1996	17,400	16,032	0	3,860	166,000	12,200	11,700	12,200	22,300
1997	19,600	18,114	24	4,990	167,000	13,100	11,700	11,900	24,500
1998	19,300	18,960	40	4,710	163,000	14,300	11,700	11,700	24,200
1999	19,300	19,800	0	4,540	166,000	15,200	11,700	11,400	24,200
2000	16,600	21,500	0	6,260	161,000	15,200	11,700	11,100	21,500

#### **Helium Worksheet Notes**

#### **Data Sources**

Sources of data for the helium worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data were not available. Helium volume measured at  $70^{\circ}$  F and 14.7 pounds per square inch absolute (psia) was converted to weight with the conversion: 169.29 metric tons (t) = 1 million cubic meters.

#### Production

Production data for the years 1935–2000 were recorded from the MYB. Production data for the years 1935–2000 represent the total helium content in Grade-A and crude helium that was recovered as a constituent of natural gas.

#### **Shipments**

Shipment data for the years 1941–2000 were recorded from the MYB. Shipment data for the years 1941–2000 represent the total quantity of Grade-A helium that was produced in the United States and sold to domestic recipients. Data were not available for the years 1935–40.

#### **Imports**

Import data for the years 1985–98 were recorded from the MYB. Import data for the years 1985–98 represent the quantity of helium that was imported annually into the United States. Data were not available for the years 1935–84.

## **Exports**

Export data for the years 1962–2000 were recorded from the MYB. Export data for the years 1962–2000 represent the quantity of Grade-A helium that was exported from the United States. Data were not available for the years 1935–61.

#### **Stocks**

Stock data for the years 1945–2000 were recorded from the MYB. Stock data for the years 1945–2000 represent the total quantity of helium that is stored annually in the Bureau of Land Management (BLM) helium conservation storage system. Data were not available for the years 1935–44 and 1948–53.

#### **Apparent Consumption**

Apparent consumption data for the years 1940–41, 1944, 1946, and 1949–2000 were recorded from the MYB. Apparent consumption data for the years 1940–41, 1944, 1946, and 1949–2000 represent the total quantity of helium that was consumed annually within the United States. Apparent consumption data for the years 1935–39, 1942–43, 1945, and 1947–48 were not available. Subsequently, because import and export data were not available for the years 1935–39, 1942–43, 1945, and 1947–48, apparent consumption was estimated to be equal to production.

#### Unit Value (\$/t)

Unit value data for the years 1938–2000 were recorded from the MYB. Unit value data for the years 1938–2000 represent the average value per metric ton of Grade-A helium as produced in the United States. Unit value data for the years 1942–46 were not available. Subsequently, unit value data for the years 1942–46 were interpolated. Data were not available for the years 1935–37.

#### Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

### **World Production**

World production data for the years 1935–2000 were recorded from the MYB. World production data for the years 1935–2000 represent the summed quantity of total U.S. helium production and the total estimated production capacity of all other helium-producing countries. For the years 1935–62, world production is equal to U.S. production.

#### References

- U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.
- U.S. Bureau of Mines, 1933–96, Minerals Yearbook, 1932–94.
- U.S. Geological Survey, 1901–27, Mineral Resources of the United States, 1900–23.
- U.S. Geological Survey, 1997–2002, Minerals Yearbook, v. 1, 1995–2000.

## For more information, please contact:

Norbert Pacheco Team Leader, Resources Evaluation, U.S. Bureau of Land Management (806) 324-2656 Norbert Pacheco@blm.gov

> Thomas D. Kelly Minerals and Materials Analysis Section, USGS (303) 236-8747 x 269 kellyt@usgs.gov